

the stiff limbs. Used at the essential moment, however, in a proper manner, carefully controlled, it is, I repeat, the best single means at our disposal. This argument, however, is no excuse for rough treatment, for unskillful handling, and especially not for the masseuse attempting to find painful spots and then bruising them. A good masseuse desires directions when wisely offered—a bad one may be known by her resentment of them. Good, careful work is desired. Good, efficient work of this kind is not equally secured by a ten weeks' trained university student, even when armed with a couple of well-kept and thumbled card indexes. The next best procedure is passive congestion—the well-known "Thomas dam," after the method of Thomas, of Liverpool. I have said *the best means and the next best means*, but far better than either is their combination, the massage beginning just after the peak of the congestion has passed. Care must be taken, and especial directions must be given, that the treatment must not provoke pain. Treatment must be given daily at first. Splinting should be at first continued at night, or for many hours daily if found necessary to prevent spasm or deformity.

General soreness during the course of treatment is combated with epsom salt packing; local tenderness with leeching and cauterization; local edema and dense thickening with leeching or citrate of soda injections; the general weariness and heart soreness, with gentleness and persistence; discouragement and procrastination, with firmness and reassurance of improvement.

SKIN RASHES IN EXOPHTHALMIC GOITRE

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The purpose of this communication is first to report two cases which presented what is apparently an uncommon skin complication, and secondly to review very briefly the available literature upon skin rashes in Exophthalmic Goitre.

Case 1. Mrs. W. Age 36. Had had, since puberty, a very slightly enlarged, symmetrical thyroid, without symptoms, either during her two pregnancies, or at any other time. The patient's attention was attracted to her thyroid by comments of her friends. When she consulted me in 1919 her thyroid measured 5.5 cm. in horizontal diameter, and there were no unusual manifestations. In October, 1920, I was called to see her, because of violent itching. She was somewhat thinner than formerly, with a definite exophthalmos; pulse, 140; lid lag, marked tremor of hands, and intense itching. There was a discrete rash scattered over arms, body, and legs, most profusely over the legs, as high as the knees. This consisted of deep, pink, almost red macules, barely perceptibly raised, varying from the size of a pea to that of a quarter. They disappeared on pressure. There was no scaling, no weeping, and no edema. Never having seen such a rash associated with goitre, I gave cathartics and local antipruritics, without benefit. Dr. C. E. Schoff, who saw the patient with me, agreed that the rash was probably toxic, and we advised partial thyroidectomy, which was done. About two-thirds of the gland was excised by Dr. J. B. Harris. There was a marked exacerbation of rash upon the night following the resection. Upon the third post-operative day, the skin was clear. There has been no recurrence.

Case 2. Mrs. R. Consulted Dr. Harris because of a goitre, tremor, tachycardia, and loss of weight. Examination showed very slightly elevated macules, deep pink in color, in size varying from a pea to a dime. They itched "quite a lot." The distribution was symmetrical, and about ten were present upon each forearm, and twenty upon each leg. In this patient too, an exacerbation was had upon the day following operation. The rash disappeared on the fourth post-operative day. There has been no recurrence.

The dermatoses described in patients with exophthalmic goitre are many and various in appearance, pathology, and probably in etiology as well. Text books and available literature describe many skin conditions as occurring in exophthalmic goitre, but in the main, without classification or endeavor to correlate the skin pathology with the known physiological upsets, produced by an overacting thyroid gland; (3) (4) (5) (6) (7). J. du Castel (1) divides the dermatoses as follows:

- (1) Vasomotor, such as hot flashes, dermatographia, edema, purpura;
- (2) Trophic, such as melanoderma, vitiligo, scleroderma, alopecia;
- (3) Toxic, such as urticaria, pruritus, erythema, etc.;
- (4) Microbial, such as furunculosis, eczema, etc.

Hyde and MacEwen (2) make an effort to classify upon basis of etiology.

Their group 1 includes dermatoses of accidental concurrence such as acne, eczema, some urticarias, tinea versicolor, leukoderma, and pigmentations.

Group 2 includes dermatoses more or less distantly related to the essential morbid processes of goiter, such as hyperidrosis, urticaria, erythema, sudaminae, hydrocystoma.

Group 3 includes dermatoses intimately related to the morbid processes of goiter, such as scleroderma, edema, myxedema.

A goodly proportion of the skin rashes mentioned in the literature falls into Group 1 of this classification, and a still larger number into Group 2. In all probability most dermatoses described with exophthalmic goiter are no more than results of a hypersusceptibility to insult brought about through the moist, congested, and often slightly edematous condition of the skin. However, a small number of these skin conditions may be the direct results of the pathological thyroid physiology accompanying exophthalmic goiter.

The two rashes described above, apparently depend quite directly upon thyroid intoxication, they both flared up and then disappeared after partial thyroidectomy.

References

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3. A. Maude: *Brain*, 1894, p. 246.
4. S. E. Dore: *Brit. Jr. Dermat.*, October, 1900, p. 353.
5. Burton: *Lancet*, London, September 22, 1888, p. 573.
6. Sabourand: *Annals d. Dermat. et Syph.*, vol. IV, 1913, p. 140.
7. Chambers: *Domin. Med. Monthly*, February, 1903. Capital National Bank Building.

A USEFUL APPARATUS IN PHYSIO-THERAPY*

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Inasmuch as the essential equipment commonly used is complicated and expensive, the apparatus herewith illustrated and described has been devised to obtain a high temperature flowing areated bath

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